

~~A1~~
cont.

7 a gate electrode provided on said gate insulating film and formed with a P-N junction including a
8 P-type semiconductor region and an N-type semiconductor region,
9 wherein said P-type semiconductor region and said N-type semiconductor region of said P-N
10 junction of said gate electrode are electrically insulated,
11 wherein said gate electrode includes a first gate portion provided above said channel region and
12 a second gate portion provided above a region which is not said channel region, and said second gate
portion includes said P-N junction.

B3
~~A2~~

6. (Amended) The semiconductor device according to claim 1, further comprising;
a body region formed of a semiconductor under said channel region;
a buried insulating film provided under said body region, said source region, and said drain region;
and
a semiconductor substrate region provided under said buried insulating film.